UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

21496

7590

08/08/2008

KURT C. OLSEN SANDIA LABS - MAIL STOP 9031 P O BOX 969 LIVERMORE, CA 94551-0969 EXAMINER
HYUN, PAUL SANG HWA
ART UNIT PAPER NUMBER

1797

DATE MAILED: 08/08/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,871	08/04/2003	Ronald F. Renzi	SD-8412.1	5267

TITLE OF INVENTION: PORTABLE APPARATUS FOR SEPARATING SAMPLE AND DETECTING TARGET ANALYTES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	11/10/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

appropriate. All further indicated unless correct maintenance fee notifica	correspondence includir ed below or directed oth	ng the Patent, advance onerwise in Block 1, by (rders and notification of r a) specifying a new corres	naintenance fees v pondence address	vill be and/o	mailed to the current r (b) indicating a sepa	correspondence address as trate "FEE ADDRESS" for	
	ENCE ADDRESS (Note: Use BI	Feet pape	s) Transmittal. Thers. Each additiona	is certii I papei	ficate cannot be used f	r domestic mailings of the or any other accompanying nt or formal drawing, must		
21496	7590 08/08	/2008	nave			C		
P O BOX 969	- MAIL STOP 903	I he Stat addı tran	reby certify that thes Postal Service v	is Fee(e of Mailing or Trans s) Transmittal is being fficient postage for firs ISSUE FEE address (1) 273-2885, on the d	mission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.		
LIVERMORE, 0	CA 94551-0969						(Depositor's name)	
							(Signature)	
							(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTC	RNEY DOCKET NO.	CONFIRMATION NO.	
10/633,871	08/04/2003	•	Ronald F. Renzi		SD-8412.1		5267	
TITLE OF INVENTION	: PORTABLE APPARA	TUS FOR SEPARATIN	G SAMPLE AND DETEC	TING TARGET A	NALY	TES		
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1440	\$300	\$0		\$1740	11/10/2008	
EXAM	IINER	ART UNIT	CLASS-SUBCLASS					
HYUN, PAUL	. SANG HWA	1797	422-082050					
1. Change of correspond CFR 1.363).	ence address or indicatio	n of "Fee Address" (37	2. For printing on the p			1		
	ondence address (or Cha B/122) attached.	nge of Correspondence	(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to					
	ication (or "Fee Address							
PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			2 registered patent attorneys or agents. If no name is listed, no name will be printed.					
3. ASSIGNEE NAME A	ND RESIDENCE DATA	A TO BE PRINTED ON	I THE PATENT (print or typ	pe)				
PLEASE NOTE: Uni	less an assignee is ident	ified below, no assignee	data will appear on the p T a substitute for filing an	atent. If an assign	ee is i	dentified below, the d	ocument has been filed for	
(A) NAME OF ASSI	•	bledon of this form is NO	(B) RESIDENCE: (CITY		COUNT	TRY)		
						,		
Please check the appropr	riate assignee category or	categories (will not be pa	rinted on the patent):	Individual 🖵 Co	orporat	ion or other private gro	oup entity Government	
4a. The following fee(s)	are submitted:	b. Payment of Fee(s): (Plea	se first reapply a	ny prev	viously paid issue fee	shown above)		
☐ Issue Fee			☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached.					
☐ Publication Fee (No small entity discount permitted)☐ Advance Order - # of Copies			The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any					
			overpayment, to Depo	sit Account Numb	er	(enclose a	n extra copy of this form).	
5. Change in Entity Sta	tus (from status indicate is SMALL ENTITY stati	· · · · · · · · · · · · · · · · · · ·	☐ b. Applicant is no lon	ger claiming SMA	LL EN	TITY status. See 37 Cl	FR 1.27(g)(2)	
NOTE: The Issue Fee an	d Publication Fee (if req	uired) will not be accepte	d from anyone other than t				e assignee or other party in	
interest as shown by the	records of the United Sta	tes Patent and Trademark	Office.					
Authorized Signature				Date				
Typed or printed name				Registration No.				
This collection of inform	nation is required by 37 C	FR 1.311. The information	on is required to obtain or r	etain a benefit by t	he pub	lic which is to file (and	by the USPTO to process)	
an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 d application form to the ions for reducing this bu. Virginia 22313-1450. DC	U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the NOT SEND FEES OR	1.14. This collection is esty depending upon the individual chief Information Office COMPLETED FORMS TO	imated to take 12 idual case. Any corr, U.S. Patent and DTHIS ADDRESS	minute ommen Trader S. SEN	s to complete, including ts on the amount of times of the complete of the comp	g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/633,871 08/04/2003		Ronald F. Renzi	SD-8412.1	5267	
21496 7590 08/08/2008			EXAMINER		
KURT C. OLSEN	V	HYUN, PAUL	SANG HWA		
SANDIA LABS - MAIL STOP 9031			ART UNIT PAPER NUMBER		
P O BOX 969 LIVERMORE, CA	. 94551-0969		1797 DATE MAILED: 08/08/200	8	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 517 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 517 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)
	10/633,871	RENZI ET AL.
Notice of Allowability	Examiner	Art Unit
	PAUL S. HYUN	1797
	PAUL S. HYUN	1797
The MAILING DATE of this communication appea. All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this ap or other appropriate communication IGHTS. This application is subject t	plication. If not included n will be mailed in due course. THIS
1. X This communication is responsive to <u>amendment filed on 2</u>	25 April 2008.	
2. X The allowed claim(s) is/are <u>1,2,7,9,10,12-21,57,58 and 61-</u>	<u>-64</u> .	
3. ☐ Acknowledgment is made of a claim for foreign priority ur a) ☐ All b) ☐ Some* c) ☐ None of the:		
1. Certified copies of the priority documents have		
2. Certified copies of the priority documents have	• • • • • • • • • • • • • • • • • • • •	
3. Copies of the certified copies of the priority do	cuments have been received in this	national stage application from the
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements
 A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give 		
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.	
(a) ☐ including changes required by the Notice of Draftspers	on's Patent Drawing Review (PTO	-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or in the C	Office action of
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t		
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT		
Attachment(s)	5. Notice of Informal E	Patent Application
 Notice of References Cited (PTO-892) D Notice of Draftperson's Patent Drawing Review (PTO-948) 	 5. ☐ Notice of Informal F 6. ☐ Interview Summary 	
	o. ☐ Interview Summary Paper No./Mail Da 7. ☐ Examiner's Amendi	te
 Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 		
 Examiner's Comment Regarding Requirement for Deposit of Biological Material 		ent of Reasons for Allowance
	9.	

ALLOWANCE

Remarks

The amendment filed by Applicant on April 25, 2008 in response to the Office action dated January 9, 2008 has been acknowledged. In the Office action dated January 9, 2008, claims 3 and 4 were objected to as being dependent upon a rejected base claim, but otherwise allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In response, Applicant amended independent claims 1, 7 and 61, incorporating the subject matter of claims 3 and 4 into each independent claim. Currently, claims 1, 2, 7, 9, 10, 12-21, 57, 58 and 61-64 are pending.

The amendments to the Specification filed by Applicant to correct spelling and grammatical errors have been acknowledged.

Oath/Declaration

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the mailing address of each inventor. A mailing address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The mailing address should include the ZIP Code designation. The mailing address may be provided in an application data sheet or a supplemental oath or declaration. See 37 CFR 1.63(c) and 37 CFR 1.76. The oath or

declaration should also identify the city and either state or foreign country of residence of each inventor. The residence information may be provided on either an application data sheet or supplemental oath or declaration.

Allowable Subject Matter

Claims 1, 2, 7, 9, 10, 12-21, 57, 58 and 61-64 are allowed.

The following is an examiner's statement of reasons for allowance:

Berndt et al. (US 6,811,668 B1) disclose a modular microfluidic apparatus comprising a fluid manifold base coupled to a microfluidic chip. The fluid manifold base comprises a plurality of bays extending through the thickness of the base, and a plurality of reservoirs positioned within the bays. The microfluidic chip comprises a plurality of inlets and ports positioned in locations corresponding to the reservoirs. However, the apparatus disclosed by Brendt et al. do not disclose sealed reservoirs configured to be penetrated by a needle that enables fluid communication between the reservoirs and the microfluidic chip. Moreover, none of the prior art on record offers motivation to provide the apparatus disclosed by Brendt et al. with a needle/seal combination.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/633,871 Page 4

Art Unit: 1797

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL S. HYUN whose telephone number is (571)272-8559. The examiner can normally be reached on Monday-Friday 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul S Hyun/ Examiner, Art Unit 1797 /Jill Warden/ Supervisory Patent Examiner, Art Unit 1797